

REMARKS

By this amendment, Figures 6-8, paragraphs [0070], [0071], [0073], [0091] and [0094] of the specification and claims 1, 9 and 14 have been amended. No new matter has been added.

Claims 1-14 remain pending in the application. Reconsideration and allowance of all of the claims is respectfully requested in view of the foregoing amendments and the following remarks.

In regard to Objection to the Drawings

The Examiner has objected to the drawings as failing to comply with 37 C.F.R. 1.84(p)(4) because reference character 108 has been used to designate both the drive sprocket and a bearing as shown in Figure 7.

In response to the Examiner's objection, the Applicants have amended Figures 6-8 and paragraph [0071] of the specification. As a result of these amendments, the bearing in Figures 6-8 is now designated by the number 107. The drawings are now believed to be in full compliance with the Rules. As such, it is believed that the Examiner's objection has been overcome and should be withdrawn.

In regard to Objection to the Specification

The Examiner has objected to the specification because the reference characters "108" and "88" have both been used to designate the drive sprocket as shown in paragraphs 70 and 92-94 in the disclosure.

The Applicants submit that the reference characters 88 and 108 in the specification do not designate the same drive sprocket, but different drive sprockets in alternative embodiments. The drive sprocket 88 drives the belt 94 in the embodiment shown in Figure 6 and described in paragraphs [0070]-[0072], and the drive sprocket 108 drives the chain 112 in the embodiment shown in Figure 7 and described in paragraph [0073].

Paragraph [0091] has been amended to clarify this distinction between the drive sprockets 88 and 108. No new matter has been added by way of this amendment, as it merely

clarifies the distinction between various embodiments that were already shown in Figures 6, 7 and 8 as originally filed.

The Applicants submit that paragraphs [0092]-[0094] are in compliance with the Rules. These paragraphs describe a construction that can be applied to either the drive sprocket 88 shown in Figure 6 or the drive sprocket 108 shown in Figure 7, as described in paragraph [0091]. Paragraphs [0092]-[0094] refer to the drive sprocket 108 by way of example only.

The Examiner has also objected to the specification because in paragraph 94, “belt 92” should be changed to “belt 94”. In response to the Examiner’s remarks, paragraph [0094] has been amended to recite a “belt 94”. No new matter has been added by way of this amendment.

In view of the above remarks, it is believed that all of the Examiner’s objections to the specification have been addressed and overcome and should be withdrawn.

In regard to Objection to Claims 9 and 14

The Examiner has objected to claims 9 and 14 because in both claims “non rotational” should be changed to “non-rotational”. In response to the Examiner’s objection, claims 9 and 14 have been amended to recite “non-rotational movement”.

The Examiner has also objected to claim 14 because “output member” should be changed to “power output member”. In response to the Examiner’s objection, claim 14 has been amended to recite “power output member”. The same amendment has been made to claim 9. No new matter has been added by way of these amendments.

In view of the above remarks, it is believed that the Examiner’s objections to claims 9 and 14 have been addressed and overcome and should be withdrawn.

In regard to Rejection of Claim 14 Under 35 USC § 112, second paragraph

The Examiner has rejected claim 14 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. Referring to the rejection,

[i]n the last line of claim 14, “transmitting rotational movement of the output member from the drive member” renders the claim indefinite. It is unclear to the Examiner how the drive member transmits rotational movement to the output member, when it appears the output member translates rotational movement to the drive member.

In response to the Examiner’s remarks, claim 14 has been amended to recite “transmitting rotational movement of the power output member to the drive member.”

As such, it is believed that the Examiner’s rejection of claim 14 has been addressed and overcome, and should be withdrawn.

In regard to Rejection of Claim 1 Under 35 USC § 102(b)

The Examiner has rejected claim 1 under 35 U.S.C. § 102(b), as being anticipated by Kondo, U.S. Patent No. 4,662,471. The Applicants believe that this rejection has been addressed and overcome by the present amendment.

The Examiner’s attention is directed to the following feature of claim 1 as amended:

the link transmitting the power from the power output member to the power transmitting device such that variation in at least one of angular or axial misalignment between the power output member and the power transmitting device during operation of the vehicle is tolerated.

The Applicants submit that at least the above feature of claim 1 as amended is not taught by Kondo.

Referring to lines 6-10 of column 1 of Kondo, Kondo

relates to a chain and shaft drive for a balloon tired motorcycle and more particularly to an improved drive for such a motorcycle embodying a drive shaft in the final drive portion.

Referring now to lines 42-46 of column 3 of Kondo,

[t]he adjustable pivotal support 24 for the trailing arm 23 will now be described by primary reference to FIGS. 4 through 8. This adjustable support 24 is particularly useful for permitting adjustment of the tension in the chain 43.

Referring now to lines 2-14 of column 4 of Kondo,

[t]o tension the chain, the screws 64 are withdrawn sufficiently so as to permit the washers 63 to be rotated. It should be noted that the washers 63 have a hexagonal shape so as to permit the easy rotation of them by an appropriate tool. Because of the eccentricity of the sleeves 59, their rotation will affect longitudinal movement of the pivot axis for the trailing arm 23 so as to cause the trailing arm to move in the direction of the arrow in FIG. 8. This will effect tensioning of the chain 43 and the device can be locked in the tensioned position by retightening the locking screws 64 so that they move into registry with new sets of notches 65.

It would be apparent that Kondo teaches adjusting the tension in the chain 43 by adjusting the longitudinal position of the trailing arm 23. Kondo teaches making this adjustment by rotating the washers 63 with an appropriate tool, and then locking the device in the tensioned position by tightening the locking screws 64. As such, this adjustment can only be performed when the vehicle is not in operation. It would not be possible to perform this adjustment on the vehicle of Kondo during operation of the vehicle, because it requires the use of tools to loosen the locking screws 64 and rotate the washers 63. In addition, Kondo teaches locking the device in the tensioned position after the adjustment is made, to ensure that the selected alignment is maintained. Therefore, Kondo does not teach a link transmitting power from a power output member to a power transmitting device such that variation in at least one of angular or axial misalignment between the power output member and the power transmitting device during operation of the vehicle is tolerated.

Therefore, at least one feature of claim 1 as amended is not taught by Kondo, and the Examiner is requested to withdraw his rejection thereof.

In regard to Rejection of Claims 2, 3, 5, 7 and 8 Under 35 USC § 103(a)

The Examiner has rejected claims 2, 3, 5, 7 and 8 under 35 U.S.C. § 103(a), as being unpatentable over Kondo in view of Onishi, U.S. Patent No. 4,465,157. The Applicants believe that this rejection has been addressed and overcome by the present amendment.

The Examiner's attention is directed to the following feature of claim 1 as amended:

the link transmitting the power from the power output member to the power transmitting device such that variation in at least one of angular or axial misalignment between the power output member and the power transmitting device during operation of the vehicle is tolerated.

As discussed above with respect to claim 1, the above feature of claim 1 is not taught by Kondo.

This deficiency in Kondo is not remedied by Onishi, without admitting that Onishi can be combined with Kondo and reserving the right to argue thereagainst in the future.

Referring to lines 6-7 of column 1 of Onishi, Onishi “relates to engine mounting devices for motorcycles”.

Referring now to lines 59-68 of column 3 of Onishi,

[w]hen the motorcycle is suddenly started, high tension acts on the serrated belt 10 and the engine body 2 is strongly pulled rearwardly. When this is the case, the engine body 2 strikes the spacers 30 to prevent excessive compression of the vibration absorbing rubber members 23 and 27 and rearward movement of the engine body 2. This is conducive to prevention of loosening of the serrated belt 10 or random meshing thereof with the sprocket wheels 8 and 9.

It would be apparent that Onishi teaches preventing rearward movement of the engine body and thereby preventing loosening of the serrated belt 10 when the motorcycle of Onishi is started, to avoid random meshing of the serrated belt 10 with the sprocket wheels 8 and 9. The purpose of Onishi is to prevent relative movement between components of the vehicle, and not to tolerate variations in misalignment that may be the result of such movement. Therefore, Onishi does not teach a link transmitting power from a power output member to a power transmitting device such that variation in at least one of angular or axial misalignment between the power output member and the power transmitting device during operation of the vehicle is tolerated.

Therefore, at least one feature of claim 1 as amended is not taught by Kondo or Onishi, alone or in combination, which combination is not admitted. As such, the Examiner is requested to withdraw his rejection of claims 2, 3, 5, 7 and 8 depending therefrom.

In regard to Rejection of Claim 4 Under 35 USC § 103(a)

The Examiner has rejected claim 4 under 35 U.S.C. § 103(a), as being unpatentable over Kondo in view of Onishi, and further in view of Price, U.S. Patent No. 6,488, 110. The Applicants believe that this rejection has been addressed and overcome by the present amendment.

The Examiner's attention is directed to the following feature of claim 1 as amended:

the link transmitting the power from the power output member to the power transmitting device such that variation in at least one of angular or axial misalignment between the power output member and the power transmitting device during operation of the vehicle is tolerated.

As discussed above with respect to claim 1, the above feature of claim 1 is not taught by Kondo.

As discussed above with respect to claims 2, 3, 5, 7 and 8, this deficiency in Kondo is not remedied by Onishi, without admitting that Onishi can be combined with Kondo.

This deficiency in Kondo is also not remedied by Price, without admitting that Price can be combined with either Kondo or Onishi.

Referring to the rejection, the Examiner states that

Price, however, does disclose that the link is selected from a group comprising a crown spline, a universal joint (66, Figures 4 and 5), a spring shaped metallic member, and a rubber member.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Kondo et al. in view of the teachings of Price to use a universal joint as the link in order to allow bending to compensate for any angular misalignment that may occur.

The Applicants submit that it would not have been obvious to a person skilled in the art to modify Kondo to add the universal joint of Price.

Referring to lines 6-10 of column 1 of Kondo, Kondo

relates to a chain and shaft drive for a balloon tired motorcycle and more particularly to an improved drive for such a motorcycle embodying a drive shaft in the final drive portion.

Referring to lines 42-46 of column 3 of Kondo,

The adjustable pivotal support 24 for the trailing arm 23 will now be described by primary reference to FIGS. 4 through 8. This adjustable support 24 is particularly useful for permitting adjustment of the tension in the chain 43.

Referring to lines 2-14 of column 4 of Kondo,

To tension the chain, the screws 64 are withdrawn sufficiently so as to permit the washers 63 to be rotated. It should be noted that the washers 63 have a hexagonal shape so as to permit the easy rotation of them by an appropriate tool. Because of the eccentricity of the sleeves 59, their rotation will affect longitudinal movement of the pivot axis for the trailing arm 23 so as to cause the trailing arm to move in the direction of the arrow in FIG. 8. This will effect tensioning of the chain 43 and the device can be locked in the tensioned position by retightening the locking screws 64 so that they move into registry with new sets of notches 65.

It would be apparent that Kondo teaches effecting longitudinal movement of the pivot axis of the trailing arm 23, which effects tensioning of the chain 43 by increasing the separation between sprockets 42 and 44. As such, the eccentricity of the sleeves 59 of Kondo, in combination with rotation of the washers 63, provides the advantage of selectively tensioning the chain 43 of Kondo by locking the trailing arm 23 in a tensioned position.

It would be apparent to a person skilled in the art of drive systems that the configuration of Kondo cannot be combined with a universal joint as taught by Price. It is well known in the art that the purpose of a universal joint is to permit changes in driving angles between a driving and driven shaft, and as such a universal joint can be used only in a shaft-driven configuration such as the one shown in Figure 4 of Price. Therefore, it would be apparent that the universal joint of Price could not be used with the chain drive of Kondo. It would also not be obvious to modify the vehicle of Kondo to be shaft-driven so as to incorporate the universal joint of Price, because this would defeat the stated purpose of Kondo to selectively tension a chain 43 encircling a drive sprocket 42 and a driven sprocket 44.

In addition, as discussed above with respect to claim 1, Kondo teaches adjusting the tension in the chain 43 by locking the trailing arm 23 in a particular state of alignment while the vehicle is in operation. As such, there would be no motivation for a person skilled in the art to modify Kondo in view of Price “to compensate for any angular misalignment that may occur” as suggested by the Examiner, because no further angular misalignment would occur in Kondo.

Even if the teachings of Kondo and Price could be combined, which is denied, the Applicants do not admit that this combination would teach all of the features of claim 1, and reserve the right to argue thereagainst in the future.

Therefore, at least one feature of claim 1 as amended is not taught by Kondo, Onishi or Price, alone or in combination, which combination is denied. As such, the Examiner is requested to withdraw his rejection of claim 4 depending therefrom.

In regard to Rejection of Claims 9, 12 and 13 Under 35 USC § 102(b)

The Examiner has rejected claims 9, 12 and 13 under 35 U.S.C. § 102(b), as being anticipated by Kondo, U.S. Patent No. 4,662,471. The Applicants believe that this rejection has been addressed and overcome by the present amendment.

The Examiner’s attention is directed to the following feature of claim 9 as amended:

means for accommodating non-rotational movement of the power transmitting device with respect to the output member during operation of the vehicle and for transmitting rotational movement from the output member to the power transmitting device.

The Applicants submit that at least the above feature of claim 9 as amended is not taught by Kondo.

As discussed above with respect to claim 1, adjustment of the longitudinal position of the trailing arm 23 of Kondo can only be performed when the vehicle is not in operation. Therefore, Kondo does not teach means for accommodating non-rotational movement of the power transmitting device with respect to the output member during operation of the vehicle and for transmitting rotational movement from the power output member to the power transmitting device.

Therefore, at least one feature of claim 9 as amended is not taught by Kondo, and the Examiner is requested to withdraw his rejection of claim 9 and claims 12 and 13 depending therefrom.

In regard to Rejection of Claims 10 and 11 Under 35 USC § 103(a)

The Examiner has rejected claims 10 and 11 under 35 U.S.C. § 103(a), as being unpatentable over Kondo in view of Onishi. The Applicants believe that this rejection has been addressed and overcome by the present amendment.

The Examiner's attention is directed to the following feature of claim 9 as amended:

means for accommodating non-rotational movement of the power transmitting device with respect to the output member during operation of the vehicle and for transmitting rotational movement from the output member to the power transmitting device.

As discussed above with respect to claims 9, 12 and 13, the above feature of claim 9 is not taught by Kondo.

As discussed above with respect to claims 2, 3, 5, 7 and 8, this deficiency in Kondo is not remedied by Onishi, without admitting that Onishi can be combined with Kondo and reserving the right to argue thereagainst in the future. The purpose of Onishi is to prevent relative movement between components of the vehicle, and not to tolerate variations in misalignment that may be the result of such movement.

Therefore, at least one feature of claim 9 as amended is not taught by Kondo or Onishi, alone or in combination, which combination is not admitted. As such, the Examiner is requested to withdraw his rejection of claims 10 and 11 depending therefrom.

In regard to Rejection of Claim 14 Under 35 USC § 103(a)

The Examiner has rejected claim 14 under 35 U.S.C. § 103(a), as being unpatentable over Kondo in view of Onishi. The Applicants believe that this rejection has been addressed and overcome by the present amendment.

The Examiner's attention is directed to the following feature of claim 14 as amended:

wherein the shaft accommodates non-rotational movement of the power output member with respect to the drive member during operation of the vehicle while transmitting rotational movement of the power output member to the drive member.

The Applicants submit that at least the above feature of claim 14 as amended is not taught by Kondo.

As discussed above with respect to claim 1, adjustment of the longitudinal position of the trailing arm 23 of Kondo can only be performed when the vehicle is not in operation. Therefore, Kondo does not teach means for accommodating non-rotational movement of the power transmitting device with respect to the output member during operation of the vehicle and for transmitting rotational movement from the power output member to the power transmitting device.

As discussed above with respect to claims 2, 3, 5, 7 and 8, this deficiency in Kondo is not remedied by Onishi, without admitting that Onishi can be combined with Kondo and reserving the right to argue thereagainst in the future. The purpose of Onishi is to prevent relative movement between components of the vehicle, and not to tolerate variations in misalignment that may be the result of such movement.

Therefore, at least one feature of claim 14 as amended is not taught by Kondo, and the Examiner is requested to withdraw his rejection thereof.

In regard to Objection to Claim 6

The Examiner has objected to claim 6 as being dependent upon a rejected base claim, but has indicated that it would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In view of the above remarks, claim 1 as amended is now believed to be allowable. As such, the Examiner is requested to withdraw his rejection of claim 6 depending therefrom.

Additional Remarks

By the present amendment, paragraphs [0070] and [0073] of the specification have been amended to correct clerical errors. No new matter has been added by way of these amendments.

In view of the above remarks, the Applicants respectfully submit that all of the currently pending claims are allowable and that the entire application is in condition for allowance.

Should the Examiner believe that anything further is desirable to place the application in a better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

At the time of filing of the present response, the Office was authorized to charge the fees believed to be necessary to a credit card. In case of any under- or over-payment or should any additional fee be otherwise necessary, the Office is hereby authorized to credit or debit (as the case may be) Deposit Account number 502977.

Respectfully submitted,

/Jonathan David Cutler/

Jonathan D. Cutler, Reg. No. 40,576
OSLER, HOSKIN & HARCOURT LLP
Attorneys for the Applicant

OSLER, HOSKIN & HARCOURT LLP
1000 de la Gauchetière St. West
Suite 2100
Montréal, Québec H3B 4W5
Canada

Tel. (514) 904-5624
Fax. (514) 904-8101